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ABSTRACT

Using the Delphi method, this study focused on the future of the family. The purposes of this study were twofold: (1) to study current trends having impact on the function and structure of the American family; and (2) to adapt the Delphi method to the study of social change. It concluded that a consensus exists between professional sociologists and a group of nonprofessional adults in regard to the family as an institution. Also, the Delphi method was found to be successful in assessing and predicting change in the family unit. (Author/EK)

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A DELPHI STUDY OF THE FUTURE OF THE FAMILY

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During the fall and winter months of 1972-73 a Delphi study concerning a set of current trends which are affecting the institution of the American family was submitted to a sample group selected from the mailing list of the American Sociological Association members who are also members of the Section on the Family within that organization. Because the response to this project showed considerable interest on a nationwide basis by this professional group, with 64% of the sampled group responding at least once to the three mailed questionnaires, this resume of the entire project is here presented as feedback to those participating and as information to others who have an interest in the field whose names did not happen to be on the sample panel.

Predicting the future of the family in our society has become the subject of innumerable articles and books, both in professional literature and in the popular press, during the past decade. For the most part the articles, sermons, lectures, and debates that have burgeoned have been based upon individual conjecturing and have varied in credibility and merit with the individual author's ability to analyze the evidence and forecast logical and rational possible future alternatives. There has not been very much attention paid to developing methodologies with which changes in this area could be assessed and projected in a more systematic way.

The particular methodology with which the present study worked was invented by Olaf Helmer and his associates and is known as the Delphi Method. Helmer and Nicholas Rescher (1959) published under the auspices of the Rand Corporation an article dealing with the problems of methodology in predictive studies. In 1966 Helmer's book, Social Technology, appeared in which the description of the Delphi technique and its applications are given. The method utilized the opinions of experts in attempting to tap a reservoir of knowledge concerning possible future alternatives. It was Helmer's judgment

that a panel of experts might provide a consensus based upon insights that, although they might still be largely intuitive, could be considered highly reliable. The Delphi method was devised as a method "that would have the task of regularly and systematically exploring and collating experts' opinions of the future, so that their latest findings would be available at such time as they might be needed by decision-making authorities." (Helmer, 1966: 12)

The Delphi Method is based upon certain aspects of group dynamics, that is, the tendency to modify an opinion in the light of known responses of others, while avoiding other aspects, such as the tendency to be swayed by the opinion of a particular member of the group who is an acknowledged leader or charismatic individual. Thus the technique exploits the trend to reach "group" opinion while protecting, by anonymity, the respondents from individual pressure of group members. By so doing it manages to provide what should be a more realistic group response than one-shot polls or opinion surveys which arrive at group response only by statistical averaging. Basically it is a more systematic application of the old adage that many heads are better than one.

One of the factors which forecasting based upon opinions of groups of experts does not take into consideration, however, is the factor of inertia. Because we are particularly interested in possible futures which can be thought of as social, rather than technological, the evaluation of whether and when changes will occur depends upon taking into account not only the sweeping changes that are <u>possible</u> but the changes that society as a whole can accept and implement. If we are to use the opinions of experts as the basis of policy decisions in social areas we need to know if, and in what ways, opinions of experts differ from group opinions of representative groups in the whole society. Therefore the purposes of this study were: 1. to study some current trends which are having impact on the functions and structure of the American family in order to determine if consensus exists between professional Sociol-

ogists who have a particular interest in the institution of the family and a group of non-professional adults; 2. to adapt the Delphi method, designed primarily for the study of change of a technical nature, to the study of social change in order to determine the effectiveness of this method in assessing and predicting the direction of such change.

The design for this study consisted of the construction of a Delphi Questionnaire built upon ten items describing possible future outcomes of some present trends. The trends selected for study were trends which can be shown to have an impact on the interrelations of family members or which have an impact upon the interaction of the family groupings and the larger society. Each item was stated on the questionnaire as an extrapolation of the trend into a future date and the respondents were asked to evaluate whether they agreed the item as stated would in fact occur within the time span of 1973 to the year 2000. Secondly, respondents were asked to estimate the date during this time span that they judged the item as stated would have occurred. Finally, the respondents were asked to state their opinion as to whether or not the item as stated was a desirable future or an undesirable future.

This questionnaire was administered to an "expert" group consisting of a random sampling of the members of the Section on the Family of the American Sociological Association. The sampling method was to select every other name on the list of members who are residents of the 48 adjacent states. (Members who reside outside the country were not included because of delays in mailing.) The membership list itself is arranged by zip code, thus assuring that we would get a representation of this population from all geographical areas across the country.

A non-expert group was selected for comparison from two adult education classes in Introductory Sociology at two St. Louis community colleges. The professional group of American Sociological Association Family Section members (hereafter referred to as the ASA Group) and the group of St. Louis adults (hereafter referred to as the St.L Group) are thus presumed to have a current interest in the area of social issues and any differences that develop between the two groups could result at least in part from the differences in expertise in observing and evaluating social trends. It is also true that such differences could be due to other differences between the two groups and the study deals with the identification of differences that could be shown within groups due to sex and age. Respondents of both groups were asked to identify their sex and indicate whether they were under 30 or over 30 years of age.

The Delphi questionnaire was submitted for the first round in September, 1972, to the St. L Groups. Percentages of the total group as to their estimate of the probability of the event occurring before the year 2000, and as to their estimate of the desirability of the occurrence of each item were computed. In addition, median dates and semi-interquartile ranges were computed for each item on the basis of projected dates within the time span 1973 to 2000 that the respondents estimated the item as stated would have occurred. This information was made a part of the second round of the questionnaire and the St. L Group was then presented the questionnaire for a second round of evaluation. The respondents were invited to comment on their reasons if their individual evaluations of the date by which an item would occur was outside the middle 50% range of estimates obtained on the first round of questioning. The percentages and median and Q ranges were again computed for this second round. The comments which respondents included with their second round responses were edited in order to avoid repetition. The third round was then presented to the group

for a final reevaluation, again taking into consideration the comments and group responses from the previous round.

Essentially the same process was followed in studying the expert group with the exception that the questionnaire was mailed to each panel member with an accompanying letter of explanation of the nature of the questionnaire. Neither group was told that results from the two sets of investigations would be compared.

Each set of three rounds was then analyzed to determine the amount of shift in opinion from the first to the third round and also to determine if responses of males were significantly different from females and if responses of older (i.e., over 30) respondents were significantly different from younger respondents. The two groups were then compared as to the results of the third round of questioning.

The construction of a Delphi Questionnaire can take several alternate steps. One method is to solicit from a panel of experts some statements about current trends which are affecting their field of expertise and which seem to indicate possible future directions. This in effect is Round 1 of a Delphi study. The array of statements, or a selection of items from the total array, is then presented to a panel of participating experts for their evaluation. On subsequent rounds the same respondents are asked to reevaluate the items, taking into consideration the information as to group responses to the previous rounds.

In this study the first step of collecting an array of items was done by a search of the relevant literature so that an already constructed questionnaire could be presented to the respondents. Therefore the participants were asked to respond three separate times and the results of the third round indicated the consensus that the groups were able to reach. Although there are numerous areas that could have been used for this study, one of the problems in constructing the questionnaire was in limiting items to a number that could be

handled in the rather ponderous and unwieldy methodology with which we were working. Since response to our mailed questionnaire depended upon willingness to undertake three separate evaluations of the items in order to provide the necessary data (and of course for the St. L Group to participate on three separate class meetings in this project), we were very much constrained to keep the questionnaire brief and pointed. In addition, since we were questioning groups with rather widely divergent levels of sophistication in dealing with social issues, we needed to use items that could be readily understood by beginning students as well as by professionals in the discipline. At the same time we wished to deal with items that have a relevance to the functions and the related structures of the American family and could be seen as parts of an interrelated series of changes that appear to be taking place in the family. Finally, because we were dealing with possible future alternatives, we tried to construct items that were "open" in the sense of allowing more than one interpretation. Since the future is ambiguous and not yet operationally defined, we wanted to suggest possible future states without imposing restrictive qualifications as to the way these futures would actually emerge. This latter constraint was particularly thorny since, for most practising researchers, the ambiguous item or an item which is not well defined operationally is anathema, and of course one of the reasons that so many sociologists are "turned off" by future studies, which deal regularly in this ill-defined area.

Without the rather tedious reporting of results of each of the three separate rounds to both groups, I would like to discuss the rationale with which each item of the questionnaire was included and describe briefly the way the two groups had responded to each item by the end of the third round of questioning.

Item 1. There will be an almost equal number of men and women in the work force.

The American family structure has been generally accepted to be a structure wherein only one adult member is primarily involved in the work force and this

one member is the husband. In an isolated nuclear family both the mobility required by the industrial society and the separation of the nuclear unit from the supportive services of the extended family seem to make this a functional requisite. However it is becoming a clearly documented trend that both adult members of the family are becoming involved in the work force. Currently about 43% of women over the age of 16 are in the work force (U.S. Department of Commerce, 1971: 212), including 30% of the group of women who have children less than the age of six. This percentage has been increasing steadily during the past 30 years and shows no empirical evidence of changing direction. Although the women's liberation movement is seen by many as the agent of this massive shift in occupation for women, it can perhaps be more realistically seen as a response to new requirements of society, according to Jeanne Binstock (1972). The traditional assignment of half of the adult population to the production and caring for new members of society has served as occupation for women, although never recognized as a part of the labor force. Binstock views the reduction of mortality and the consequent overproduction of people as the agent which has made this traditional occupation of women a threat to the well being of society. "The consequences of modern medicine have caught us off guard, and we are forced to face the fact that if we do not take from women their role of mother and replace it with something else, we will be throttled by the overproduction of babies. We thus face the need to demand that the ancient and honorable occupation of motherhood fall into disrepute, and that women commit themselves to other occupations. Women must be "liberated" to enjoy the fruits of other occupations, whether they want to be or not." (Binstock, 1972: 99)

At the end of Round III, 80% of the St. L Group and 66% of the ASA Group had agreed that this future would occur within the specified time span. An identical median projected year, 1985, was established by both groups. A clear majority of both groups had deemed this a desirable future, 68% of the St. L Group and 71% of the ASA Group. On the basis of this information and using the

assumptions underlying the Delphi method, that events which demonstrate consensus that they will occur and are desirable have a high probability of occurring, this very similar result between the two groups appears to indicate this future projection as highly probable.

Item 2. There will be 24 hour child care facilities available to all children.

The second item is of course directly related to the question of the work role of the adult women. Certainly one of the most dramatic changes in the functioning of the American family, if the wife and mother is working regularly, with perhaps occasional maternity leave for performing her biological function of producing new members, will be in the provision of new ways for nurturance and socialization of children. Since the trend for women to return to work is most evident in the lower socio-economic classes, it seems obvious that the solution of upper class women who have wanted to be relieved of the chores of child care, that of hiring individuals to come into the home and perform this function, is not available. Separated from their extended family by the nature of the work requirements in an industrial society, the solution of other cultures of the delegation of child care to the older generation, the grandparents, is also unavailable. For large numbers the provision of child care facilities outside the home is the solution that seems to be seen as a logical way of providing for this essential societal function, and the increasing clamor for the provision of such facilities has resulted in the consideration of federal funding

In view of the consensus on the first item, the somewhat confused picture of this projection is puzzling. The St. L Group again arrived at the high percentage of 91% who agreed this would occur, but the ASA Group majority had rejected such occurrence with only 39% agreeing that it would occur. The St. L Group projected this occurrence at a median year of 1985, but those of the ASA Group who agreed that it would occur projected a median year farther into the future, 1990. Consensus was reached by both groups as to its desirability,

by 62% of the St. L Group, 60% of the ASA Group. Comments made by the respondents of the ASA Group seemed to show them placing heavy emphasis on the pragmatic aspects; the difficulty of financing such centers in the face of current national policy stands, and the concern that such facilities would be available only to higher income groups. The final opinion was not overly influenced by the feedback of these comments however as the original round to the ASA Group showed approximately the same proportion who agreed this would occur, 40%. It is rather difficult to see how the ASA Group respondents could concur that women will be at work in increasing numbers if they foresee little change in the handling of the child care function which has served in the past to keep large percentages of adult women out of the work force. One possible explanation of this seeming discrepancy was suggested by an ASA Group respondent who posited an equal number of men and women in the work force on the basis of a redefinition of the work role to include child rearing as a recognized labor force designation.

Item 3. Seventy-five percent of the under-twenty population will be in schools from age 3 to age 20.

Although the manifest function of extended education is that of producing an increasingly highly educated populace to deal with an increasingly complex technology, early enrollment of children presently referred to as "pre-school" age, serves the latent function of releasing mothers for participation in the labor force. In addition, such enrollment may lessen the affective ties of parent and child and restructure to some extent the interaction within the family. In societies or groups where child care and socialization functions have moved almost entirely out of the individual family settings, such as the Kibbutzim of Israel, the intergenerational relations are markedly altered, with affective ties to age peer groups taking precedence over family ties. (Bettelheim, 1969) The extension of involvement in educa-

tional institutions up to age 20 will also serve the latent function of prolonging the individual's interaction with a relatively narrow age group. Both the trend to increase participation in educational institutions at age three to five and at age eighteen to twenty are documented in the published census figures. (U.S. Department of Commerce, 1971:311) Whether the trend will continue and reach the proportion of enrollment of 75% of the children in these age cohorts was assessed in this item.

This item again revealed consensus in both groups by large proportions. 94% of the St. L Group, 77% of the ASA Group, agreed it would occur. Group medians were both identical at 1985. A 78% majority of the St. L Group, 76% of the ASA Group, judged it a desirable future. This appears again to be an item indicating high probability of occurring. Those of the ASA Group who disagreed had reservations about this high a proportion of the 18-20 year old age group remaining in schools, pointing to some current evidence of rejection of continuing education by numbers of youngsters alienated by "meaningless" education. A continuing trend for "pre-schools" for the age 3-5 group seemed to be completely accepted.

Item 4. There will be government regulations to induce couples to limit the number of children they procreate.

Although current falling birth rates would seem to make such regulations unnecessary in terms of uncontrolled population growth, the idea of government regulations on the number of children procreated in certain classes or groups of the population seems to be gaining support. Sterilization of the socially unfit, the poor, the criminal, the mentally or physically impaired, has some acceptance. Genetic research is now turning to the identification of potential carriers of diseases which cause physical or mental impairments in offspring, with the implication that such identification will lead to the elimination or marked decreases of such victims. In addition, the rising awareness of the

of the plight of the battered child and the increasing evidence of the results of poor parenting in the production of serious crime and delinquency leads Leo Davids (1971: 191) to project the possibility of licensing and required training in child rearing as a prerequisite for parenthood. Some precedent exists in that the investigation of the social/emotional fitness for potential adoptive parents has enjoyed acceptance for many years. The acceptance of the idea that population increases in some underdeveloped countries has made government intervention in those countries "necessary" makes the acceptance of such intervention in our society, if it should be deemed "necessary", perhaps more likely.

Both groups rejected the probability of the occurrence of this item and by similar proportions, only 41% of the St. L Group, 41% of the ASA Group, agreed it would occur. Median years arrived at by this minority proportion for both groups showed some difference, the St. L Group median year of 1994 was the farthest into the future of any median arrived at by either group. The ASA Group established a median year of 1987. The two groups differed in their evaluation of the desirability, the St. L Group registering only 27% who felt it to be desirable. The ASA Group estimation of desirability was a majority of 56%. The majority of the ASA Group who felt this to be desirable is too slim a majority to be clear cut.

Item 5. Except for regulatory statutes, there will be no legal restrictions on abortion.

When the questionnaire was designed, in the fall of 1972, this question was considered a reasonable projection for consideration. By the time of completion of the study this "future" had become a present reality due to the Supreme Court decision on the unconstitutionality of state laws which prohibit abortion. There was little doubt that the increase in legal abortions, as some states had moved to make this possible, was having a heavy impact upon the overall birth rate. In the individual family the removal of restrictions on the

performance of abortion may, along with the improvement of birth control technology and the dissemination of this technology, result in very few large families and an increasing number of childless marriages. The increasing acceptance of abortion as an individual choice is having important influences on the norms governing sexual behavior. The previously accepted norm in America of marriage providing the only sanctioned regular sexual relations may not hold when unwanted pregnancy is not a threat to undergird this norm.

Though the question of the probability of this occurring is now moot, it is worth reporting that both groups had already agreed that it would occur by majorities of 83% of the St. L Group, 86% of the ASA Group at the completion of Round II. It is somewhat surprising that the Supreme Court decision had only the rather negligible effect of increasing this majority to 88% on the final round of questioning. Apparently the small group of the ASA Group respondents who still did not think it would occur believe that the decision could be reversed, that state laws could still be operative, or that a Constitutional amendment could be passed. The effect of this new information also had scant impact on the median year forecast by the ASA Group, the median year having been established at 1980 at the completion of the second round and the median year established on the final round moving ahead only one year to 1979. The median year established by the St. L Group is the more distant 1985 but this was established before the Supreme Court decision had occurred. Both groups also established majority consensus on the desirability of the item, 59% of the St. L Group evaluating this as desirable and 79% of the ASA Group. The item, although no longer of any predictive value, does show evidence that the two groups are similar in their perception of the outcome of current trends.

Item 6. Pre-marital and extra-marital sexual relations will be acceptable societal norms.

This item is closely related to the previous item and asks directly about the acceptance of sex relations outside marriage as a societal norm. Built upon

evidence that shows sexual relations outside of marriage having increased in the pre-marital group and thus weakening the norms for sexual relations as restricted to married people, we asked our respondents to evaluate the possible acceptance of such behavior as normative. Since the isolated nuclear family in the urbanized industrialized society of America has been thought to depend heavily on the love relationship of husband and wife for its persistence, the separation of the sex relation from marriage would have impact not only on the persistence but on the number of marriages that were entered into. The wide spread acceptance of birth control measures, the increasing efficiency of the birth control technology, and the acceptance of the back-up measure of abortion by choice effectively abolish the consequences of unwanted pregnancy. Only the exercise of social pressure remains, in terms of norms of acceptable behavior, to demand that sexual relations be an exclusive function of marriage.

The item as stated was accepted in terms of agreement that it would occur by 73% of the St. L Group, but was judged desirable by less than a majority, 42%. This item was one which showed significant age-correlation in the St. L Group, with younger respondents judging it desirable in larger proportions than older respondents. Respondents in the ASA Group by the end of Round II showed 47% agreeing that the item, as stated, would occur. Because there were so many comments from this group that the statement could be true for the pre-marital group (with indications that this term also included the number of not-yet-remarried divorces) but not true for married people, where sex exclusivity seems to be functional for solidarity, a clarification seemed to be called for. When separated into two items on Round III, the ASA Group agreed that sexual relations for unmarrieds would be an acceptable norm by the year 2000 by a clear majority of 64%, and that this would be desirable by a 57% majority. On the issue of extramarital relations only 19% agreed this would be an acceptable norm and 17% considered it desirable. In terms of comparing the two groups it appears that both groups agree that sex relations for all adults, regardless of marital status, will be normative, qualified by the ASA Group's reaffirmation of the norm of

exclusivity for married people. It seems that this result opens up some interesting possibilities for the construction and testing of new hypotheses regarding changing sexual behavior patterns, an area of social behavior that has been undergoing considerable change without yet any clear indications of the changes in attitudes and opinions which underlie these shifts.

Item 7. Renewable 3 or 5 year marriage contracts will be legal.

This possible future alternative has occurred frequently in the conjectures of writers who are dealing with possible new structures of American family living. Whether such a conjecture is seen as likely and desirable by an expert and a non-expert group should lend some information as to the forecast that such a future will in fact emerge.

Because divorce and remarriage have become very widespread, the continuation of marriage contracts as lifetime contracts is seen by many as unrealistic and legally cumbersome. The legalization of alternate marriage contracts, perhaps with pre-agreed upon terms of settlement on the termination of such relationships could possibly better serve the needs of large numbers of Americans who seem to prefer a succession of monogamous marriages. Renewable, or sequential, alternate forms of marriage contracts could introduce differential types of contracts to better suit the needs of new marriages, marriages which are involved with child rearing during the minor years of children, and marriages which are again 'childless' in terms of responsibility for minor age children. Perhaps implicit in the acceptance of the idea of renewable contracts for marriage is the acceptance of legal ratification of other departures from the one presently accepted form of marriage, such forms as marriage contracts of a polygamous nature or contracts covering group marriage, communal family membership, or 'homosexual marriage'.

The St. L Group consensus on the question of agreeing that the item will occur before 2000 of 67% is contrasted by the low 37% of the ASA Group who agreed it will occur. Neither group judged this to be a desirable future event or alternative. The considerably lower percentage of the ASA Group who agreed

this would occur appears to be related to the pragmatic assessment of the factors necessary to bring this about and a doubt that society will undertake this rather radical restructuring of marriage and divorce laws. Since the current tendency of muddling through a welter of irrational laws seems to be working well enough to allow a large number of short-term marriages, there will probably not be a movement to improve the situation. In other words, radical restructuring on a more rational basis will not occur unless older irrational structures become completely disfunctional.

Item 8. Social-emotional support and therapy will be a major function of occupational groups.

With the removal of many of the former functions of the family to other institutions of the larger society, the family function of social emotional support and affectional ties among family members has generally been accorded great importance. According to this view, in a society increasingly urbanized, the loss of primary groups common to more rural settings has increased the importance of the remaining primary group, the family, in providing this kind of relationship. Such a concept of the family as a supportive primary group may be more imagined than real, as pointed out by Elise Boulding. "One of the strangest myths perpetuated in contemporary family sociology is that the family is a psychological and physical haven from the pressures of social change in the outside world." (1969: 186) It does seem to be true that urbanization has called for the invention of new and temporary primary groups. One of the institutionalized forms that has been emerging in recent decades has been the so-called encounter group or sensitivity training group. For several reasons this type of structured primary group is appearing as a function of business and industrial organizations. Because the encounter group experience deals with individual emotional states rather than concrete business or industrial problems, its relationship to these institutions may seem peripheral. However, problems of business and industry in dealing with worker satisfaction and with committee type decision making in complex organ-

izations have appeared to make strengthening of interpersonal relationships a paying proposition. Without attempting to assess the manifest function of the business or industrial encounter group in improving work relations on the job, we can see some latent function in providing for primary group relations outside of the family and could expect that this separation from the family to the extra-familial work world would also serve to restructure intrafamily interaction.

Both the St. L Group and the ASA Group agreed that this would occur before 2000. The St. L Group achieved consensus by a majority of 91%, the ASA Group by 61%. Median year projected was identical, 1985. The St. L Group majority of 85%, and the ASA Group majority of 69%, evaluated this as a desirable future. This consensus seems to indicate a surprising dependence upon the occupational sector for the fulfillment of emotional needs, needs which the industrial economy with its requirements for mobility and its fragmentation of work roles has helped create. In the ASA Group many respondents on Round I found this question difficult to assess because of the lack of operationalization. On subsequent rounds such comments disappeared as feedback comments helped to focus the issue on the shift, from traditional primary groups to secondary groups of the occupational sector, of this function of maintaining emotional well-being. This item, because consensus was so unequivocal, should be an interesting finding for management decision makers.

Item 9. More housing will be renter-occupied than owner-occupied.

William J. Goode (1970) has suggested that ours is the first civilization not built upon land holding and that ownership of property is no longer relevant to social position. Ownership and transfer of family property has been, in most other societies, one of the cornerstones of family structure. Even in our own society ownership of property has not disappeared as a family function but has mostly been relegated to ownership of the family housing facility. However,

several factors appear to be at work to make such ownership less important. Inheritance laws and the mobility of family members usually call for the liquidation of family property on the death of the owner, rather than the transfer of this property. Also the increasing concentration of the population in urban areas has reduced the availability of land for individual ownership and made the increase of construction of multi-unit housing a necessity. Although the trend for ownership of housing is still operant in our society, the most recent Statistical Abstracts (U.S. Department of Commerce, 1971: 311) show that this trend appears to be weakening and in the Western section of the country, where renter occupied housing has increased and owner occupied housing has decreased in the decade 1960-1970. The Western section of the country, particularly the state of California, has been regarded as a 'laboratory of the future' in that trends which will spread throughout the society become apparent in this section of the nation first. Rising problems, and zoning problems are some of the other constraints that will be placed upon the construction of individual family units.

On this item the two groups responded similarly with a majority of both agreeing that this event would occur, 80% of the St. L Group, 64% of the ASA Group. Only 31% of the St. L Group, 36% of the ASA Group evaluated this as desirable. Comments were to the effect that the nature of the composition of the population during the latter quarter of the twentieth century, the continuation, perhaps increase, in mobility and the shortage of land for residential building in increasingly dense urban regions, would force this, thus causing the majority to agree. At the same time the ASA Group articulated clearly the reluctance with which this future possibility was viewed and pointed to the ways that Americans still cling to the "more human salient value" for ownership by purchasing their own apartments, condominiums, or mobile homes. The median dates by which this event was estimated to occur were 1985 for the St. L Group, 1988 for the ASA Group.

Item 10. The construction of age-specific housing developments will have surpassed the construction of single family units.

The proliferation of housing developments for retired and aging citizens has already become marked in areas of the country which attract this age group, and the nature of the age levels of the population indicate that this group of the population will become very large, perhaps the dominant, age group before the year 2000. In addition the segregation of the high percentage of young people who are enrolled in educational institutions and the separation of the young and childless population into special interest groups has introduced the construction of "singles" apartment developments. Generally the further separation of society into age-segregated groupings seems to be viewed in the family literature with disfavor as a very anti-community and divisive trend although, like the expanded family communes and other subcultural groups, new life styles in these groups may also provide new patterns for the continuing reconstruction of society. For example, racial integration appears to be more acceptable and less troublesome in age-segregated communities. And new patterns of male-female division of work and sharing of responsibilities appear to be emerging in these settings.

The final results reached by the two groups are quite different on this item. In the St. L Group 90%, in the ASA Group only 31% agreed that this will occur. Both groups in their evaluation of desirability demonstrated that only a minority consider it desirable, 30% of the St. L Group, 17% of the ASA Group. Median years which were established by those of both groups who agreed that this would occur were established at an identical 1990. The wide disparity on the question of whether or not this would occur is illuminated by a sense almost of outrage by many of the ASA Group who regard the need for "community" and integration of various groups, including age groups, as crucial. This was expressed often, even by those who agreed this development would occur. The response to this item demonstrated a phenomenon that can be observed in some of the other items less

obviously, that the St. L Group shows a high degree of acceptance of these suggested futures, (a majority of the St. L Group agreed that all but one of the items under study would occur before 2000), even while they do not consider them to be desirable. This may suggest a position of powerlessness in the face of forces over which they can exercise little or no influence. In the ASA Group however one does not sense this resignation. If, as here, there are reasons to consider the event undesirable, there is a high degree of refusal to agree it will occur. This suggests that a different attitude toward societal forces appears in the professional group than in the non-professional group. Rational evaluation of trends can lead to altering trends which are identified as undesirable as well as implementing plans to bring about desired futures, which is of course the main reason for studying the future at all. It is also interesting to know that on this item the amount of shift, or change of group results from the first to the third round of reevaluation in response to feedback, was the largest shift observed in the ASA Group and was tied for largest amount of shift in the St. L Group. Apparently where issues are quite controversial, or where the trend has not yet shown definite direction, the tendency to rely on group decision and evaluations increases and there is greater willingness to change one's mind in respect to feedback from previously expressed group opinion.

Differences in responses of the two groups which could be considered age or sex connected did not develop. However within each group there were some interesting evidences of differences developed by Chi square testing of each item. On the St. L Group more women than men respondents evaluated the item concerning an equal number of men and women in the work force as a desirable future. (X^2=5.91, significant at the .05 level.) On the item concerning the extension of education for 7[illegible] of young people from age 3 to age 20, more women than men again evaluated as desirable. (X^2=3.91.) Age was also seen to affect opinion within the St. L Group on items which had to do with removal of restrictions on abortion (item 5), permissive

sex norms (item 6), and renewable marriage contracts (item 7.) On all of these items younger respondents judged the items as desirable in greater numbers than older respondents. (The respective X^2 levels were 4.32 for item 5, 4.06 for item 6, and 4.65 for item 7, all significant at the .05 level.) Similar sex and age differences on these items did not develop in the ASA Group.

Within the ASA Group significant differences due to sex of respondents occurred in response to the item concerned with renter occupied housing, with more women than men agreeing that this would occur before 2000. (X^2=4.02.) Sex differences also occurred in response to the question of social emotional support occurring in the work setting, with younger respondents evaluating 24 hour child care availability as a desirable future more frequently than older respondents. (X^2=6.46.) These differences did not show up in the non-professional group.

Although statistical analysis demonstrated that the two groups did differ in their evaluation of the probability of occurrence of these items, differences appear to be quantitative differences and the two groups exhibit a great deal of similarity in their evaluation as to whether the suggested items would occur before the year 2000 and as to the desirability of these futures. The shift over the three rounds to show conformity to previously expressed group opinion was much more apparent in the St. L Group than in the ASA Group, resulting in consensus on the third round that might be in the same direction in both groups but different in percentage points, in their evaluation of the probability of occurrence of these items. In the evaluation of the desirability of these future possibilities the ASA Group shifted opinion more than the St. L Group, however they were as likely to shift away from previously expressed opinion as toward conformity with the previously expressed opinion. Our most clear cut evidence then of conformity pressures is found in the shift toward increasing conformity on the probability of occurrences demonstrated by the St. L Group, which resulted in larger percentages of the St. L Group than on the ASA Group concurring that the items will occur. Because of this tendency toward increasing conformity in the St. L Group, it appears that the non-

professional group is less conservative than the professional group, surely a surprise challenge to the stereotype of the Sociologist as "far out" proponent of radical social change. This result also seems to offer some information to the question raised by Welty (1972) as to the deflection of opinion in expert groups. Suggesting that although the Delphi technique protected the individual from group pressure by the anonymity of the mailed questionnaire, the expert's self-image as a member of the expert group might pressure him to conform to opinions of this group, Welty reported equivocal results. In comparing our group of experts with a group of non-experts, the expert group demonstrated more resistance to conformity pressures built into the Delphi technique than did the non-expert group. The results of this study indicate furthermore that the difference in expertise in the area did not operate to make the expert group an "advance" or vanguard group in the area of anticipated social change, with the non-expert group lagging behind in acceptance. It is our belief that the higher level of expertise here is not in prior knowledge of possibilities but in the more knowledgeable assessment of the trends in terms of the probability of coming about and in the intended and unintended consequences of such future alternatives. In this vein it seems that the most important part of the Delphi exercise lies in the exchange of ideas in the form of comments made by respondents and reported back to the participants on successive rounds. Since our research design had committed us to a comparison of two groups, and because we were really not anticipating the number of comments that were received, our study did not take full advantage of this result. A design for using this technique with an expert group alone could be more free wheeling in allowing the group opinions to restructure the items themselves, to suggest alternatives for consideration, and in general to clarify the issues involved. Our spinoff investigation of Item 6, on the norms of sexual behavior, indicated some of the possibilities of such a freer design. One possibility of using such panels in various areas could take advantage of an alternate method of constructing the Delphi question-

naire by letting the panel members themselves devise an array of items to be investigated.

The portion of the study which worked with the establishment of median years at which these possible futures would come about appears to be the weakest portion of the exercise. In the first place there is a disconcerting tendency for all medians to cluster in a very narrow range. Secondly, the number of respondents is reduced here to include just the proportion who agreed that the item would occur before the year 2000. When this was a minority of the total group, the number of cases was small enough to be relatively unrevealing. Thirdly, the difficulty of judging into the future with any degree of exactness causes most judgments to fall at the five year intervals so that several judgments occur together and the placement of the median case, instead of progressing at equal intervals, could jump on the basis of one judgment a full five years. A very large sampling group could perhaps improve the reliability of these figures, but the greater advantage of using small enough groups to take advantage of the exchange of ideas in the form of comments by the respondents seems to offer more insight into the group judgments being sought.

Finally it appears that the concern was unwarranted that a professional group would be ahead of a non-professional group in foreseeing change and that an assessment of future alternatives which used only experts or professionals might present a picture which was not or could not be supported by the total population and thus had little chance of coming about. The non-professional group in this study appears to surpass the professional group in forecasting these changes.

If there is any evidence of the avant garde nature of the ASA Group it may be found in the evidence that, while the St. L Group appears to be willing to accept the probability for the occurrence of these items in larger proportions than the ASA Group, it appears to be rather consistently less willing to view such changes as desirable. The ASA Group is apparently more dubious about the

actual occurrence of the items, perhaps because of the more pragmatic assessment of the problems involved in bringing them about, but shows evidence of a more liberal view toward such change in terms of evaluating these possible futures as desirable. In assessing social issues and the probabilities of future outcomes, the professional group seems more cautious and perhaps more reliable forecasters, but not more conservative in attitudes toward changes.

The willingness, interest, and careful consideration that these panel members gave to the task of participating in the several evaluations necessary to complete the exercise convinces me that the professionals in this field are ready to provide important information for decision makers and can be as useful in the area of social issues as technical experts have been in applications of this method to technical problems. The Delphi method, is providing a quasi-forum for this widely separated group, has proven a useful technique for such an effort.

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